Enhance Mobility

TRANSFORMER
FOLDING SCOOTER

User Manual

www.EnhanceMobility.com

800-296-4151

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Thank you for choosing the TRANSFORMER Folding Scooter. Please read this manual carefully before operating the TRANSFORMER. If you have any questions or need further assistance, please contact your TRANSFORMER Dealer or Enhance Mobility directly at 800-296-4151option 2 or service@enhancemobility.com.

This manual covers the TRANSFORMER's characteristics, components, functions, safety guidelines, battery, and maintenance.

The following symbol is used in this manual to indicate warning. It is extremely important you fully understand the content. Failure to note the warnings may cause personal injury and/or damage the scooter.

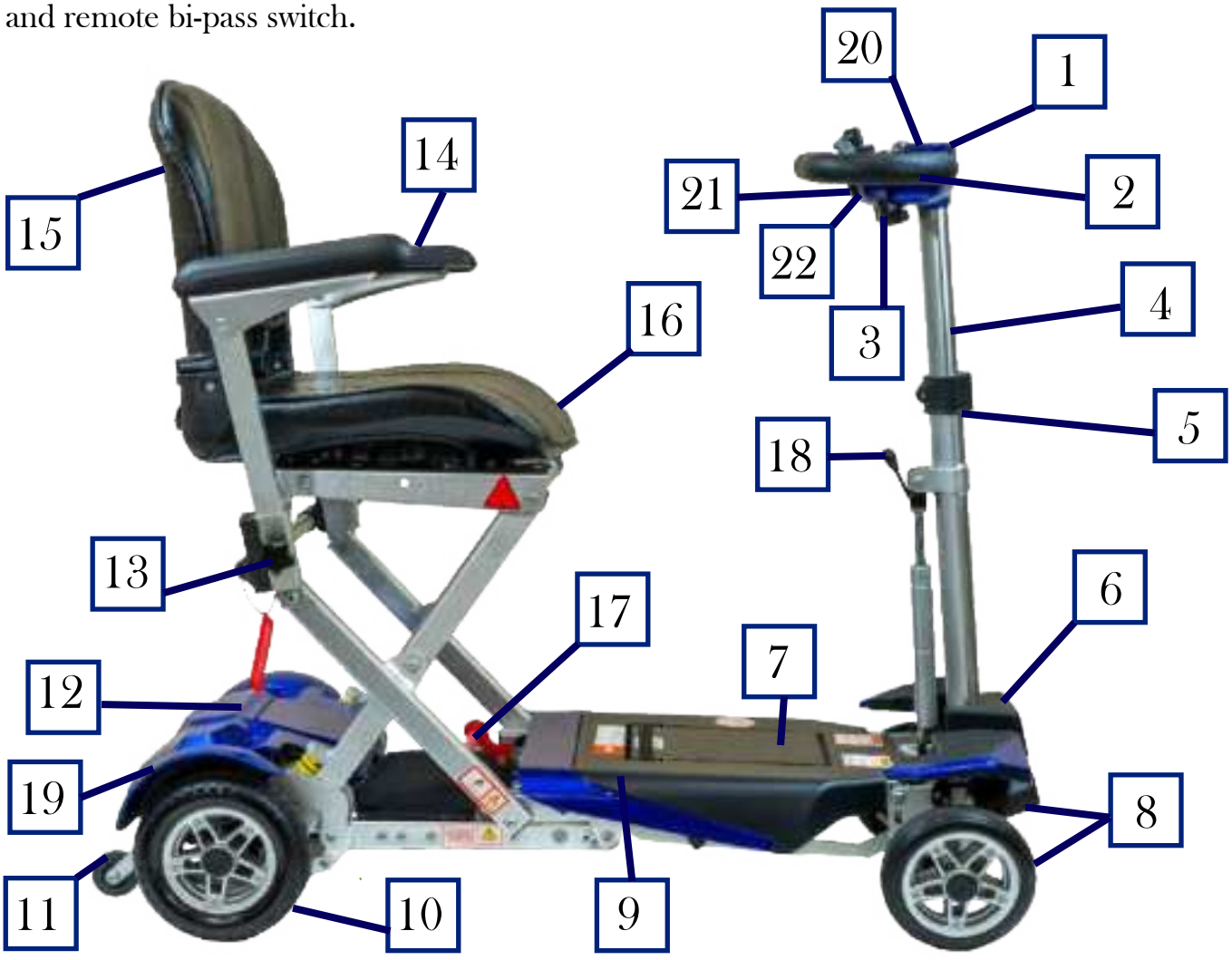
Please note all information and photos in this manual are for reference only and are subject to factory changes and modifications.

Before using your TRANSFORMER Scooter please be sure that the delivery is complete. Your TRANSFORMER package should include the owner manual, battery, key (2), remote control, battery charger, removable arm rests, 2 arm screws and 2 allen wrenches (5mm & 4mm). If you did not receive a complete delivery, contact your authorized TRANSFORMER dealer.
If damage has occurred to the packaging or contents during transport, contact the delivery company immediately.

Children should not operate the TRANSFORMER Electric Scooter.
People with health concerns should consult a physician before use.

1. Transformer Feature Guide

The TRANSFORMER is composed of the following parts: front and rear frame, handlebar controls, rear wheels, front wheels, bumper, tiller, height adjustment lock lever, tiller tilt adjuster, foldable seat, seat supporting frame, deck, battery, charger port, armrests and remote bi-pass switch.



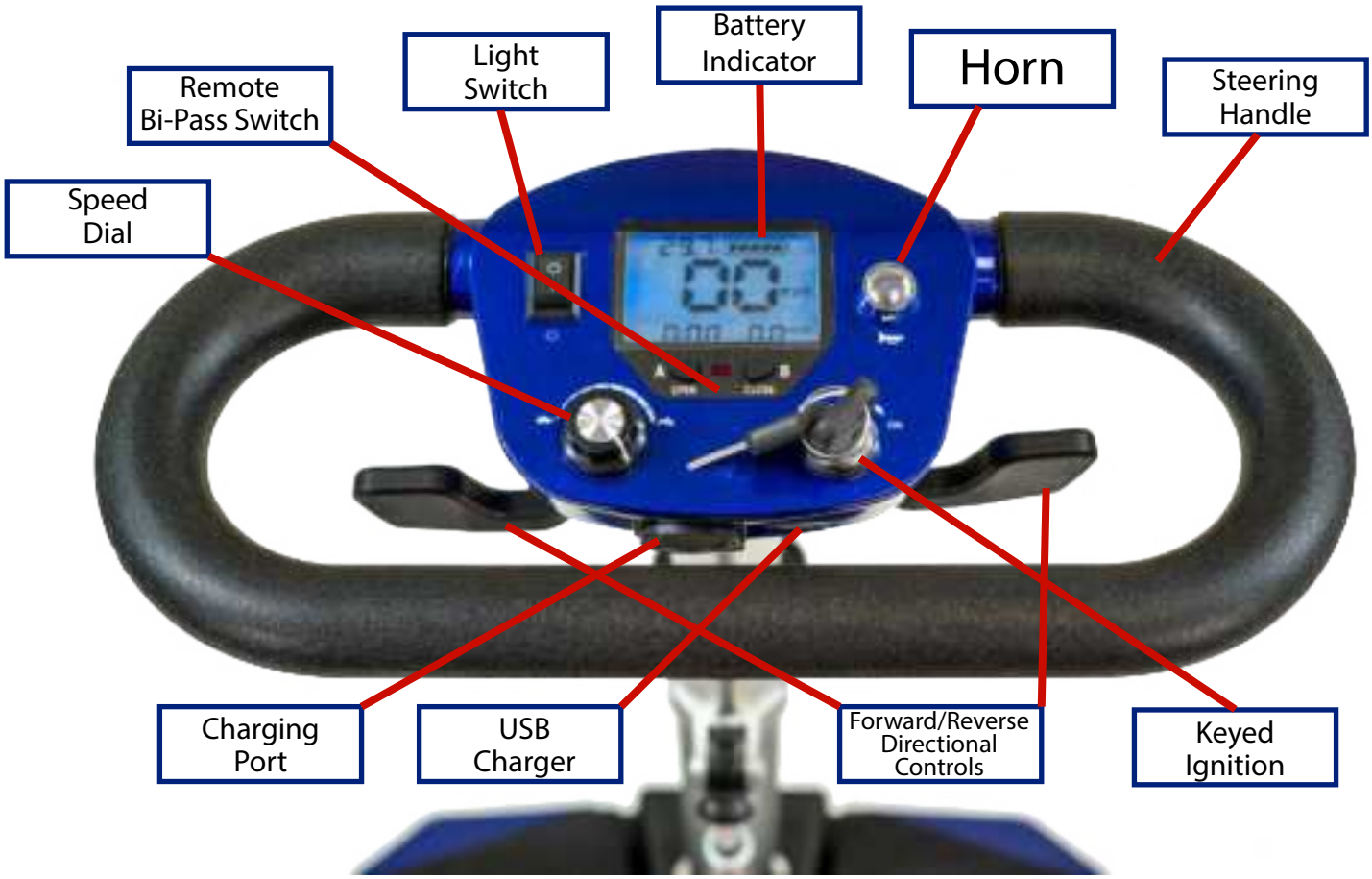
1. Control Pod
2. Steering Handle
3. Forward/Reverse Directional Controls
4. Telescoping Tiller
5. Height Adjustment Lock Lever
6. Front Housing/ Bumper
7. Battery
8. Front Wheels
9. Deck
10. Rear Wheel
11. Anti-Tip Wheel
12. Rear Deck/Housing
13. Arm Screws
14. Armrests
15. Backrest
16. Seat Cushion
17. Manual Release Bar
18. Tiller Tilt Adjuster
19. Free Wheel Lever
20. Remote Bi-Pass Switch
21. Charger Port
22. USB Port

2. Transformer Specifications

Model	Transformer S3021
Scooter Dimensions Unfolded (LxWxH)	38”x22”x37”
Scooter Dimensions Folded (LxWxH)	18”x22”x25”
Tires (Solid Wheels)	6” x 1.5” Front Tires
	7” x 2.36” Rear Tires
Maximum Speed	Up to 3.75 MPH
Range	Up to 13.5 Miles per charge
Turning Radius	55”
Heaviest Piece	55 lbs
Colors	Red, Blue, Yellow, and Black
Brakes	Intelligient Regenerative Electromagnetic Braking
Drive System	Rear Wheel Drive
Ground Clearance	3 1/4”
Maxiumum Weight Capacity	Up to 300 lbs
Seat Width	17”
Seat Height (from ground)	22”
Batteries	24V 10.5AH Lithium Ion Battery
Motor	120W
Battery Charger	DC 24V/2A Off Board (Automatic Protection Charger)

3. Key Components

Handlebar Controls



The Handlebar Control consists of the steering handle, keyed ignition, directional controls, horn, speed control, light switch, battery indicator, charging port, and the Remote Bi-Pass switch. Please be sure to familiarize yourself with each funtion.

Be sure to always protect the TRANSFORMER Handlebar Controls from humidity and water. If the handlebar controls have been affected by moisture, be sure to dry before operation.

Always slow down when turning or operating in reverse.

4. Operating Instructions

Turning on the Power

Put key in ignition and turn clockwise to turn on. The scooter will beep once when the key is turned on. Turn key counter-clockwise to power off.

Please note – If the Free Wheel Lever is engaged the scooter will make a beeping noise when the scooter is turned on. Disengage the Free Wheel Lever to operate the scooter. If Scooter is left on without moving for 15 minutes, the scooter will beep and shut off.

Free Wheel Lever

The free wheel lever is located on the rear of the scooter on the left-hand side. Pushing the lever down will allow the wheels to move freely. The lever must be pulled up to drive the scooter.

Please note – when Free Wheel is engaged the scooter will slow down if being pushed/pulled too fast.

Forward/Reverse Directional Control Lever

The Forward/Reverse Directional Control Lever is used to control forward and reverse motion.

To move Forward - Slowly pull the right side Directional Control Lever towards the handlebar, and yourself.

To move in Reverse - Slowly pull the left side Directional Control Lever towards the handlebar and yourself.

Battery Indicator

The Battery indicator is located on the top of the main control panel. When all 5 LED lights are illuminted in black, your battery is fully charged. As the battery power is consumed, the LED display will update accordingly. You can also view your remaining battery voltage to the left of the indicator.

See Section 7 for more information regarding battery charging

Speed Control Knob

The speed control knob is used for controlling the scooter's speed. When you adjust the knob to the left (tortoise), it's the minimum speed; when you adjust the knob to the right (rabbit), it's the maximum speed.

Brakes

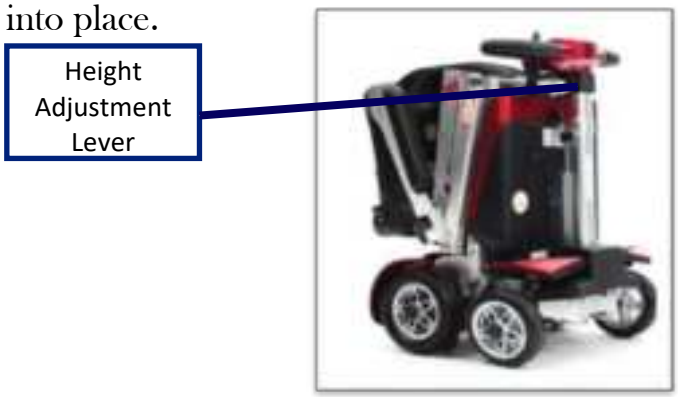
The TRANSFORMER Scooter is equipped with electromagnetic brakes. Releasing the directional control lever will stop the scooter

Horn

The Horn is located on the top of the control pod. When you press it, the horn will sound

Telescoping Tiller

The tiller height can be adjusted. Unlock the height adjuster lever and pull the tiller up until it reaches desired height, then lock height adjustment lever by pushing the lever back into place.



Adjusting The Tiller

The TRANSFORMER's tiller can adjust for rider's comfort. To adjust – squeeze and hold the tiller tilt adjuster lever towards the tiller then move the tiller towards the seat to a reach comfortable position. To put the tiller to the original position, squeeze the tiller tilt adjuster lever and the tiller will move to the original position.

5. Folding and Unfolding the Transformer

Automatic Remote Control Operation (Key Fob)

To use the remote control to open and close the scooter, the key must be turned on.

To unfold (open) the TRANSFORMER Scooter, press the top button on the key fob, and let go. Your Transformer should begin beeping, and open halfway. Repeat to open fully.

To fold (close) the TRANSFORMER Scooter – Press the bottom button on the key fob and let go. Your Transformer should begin beeping and fold halfway. Repeat to fold fully.

Manually Folding the Transformer

The TRANSFORMER Scooter can be opened or closed manually.

To Open Manually –

1. Locate the red manual release bar in the middle of the scooter.
2. Squeeze bar toward the tiller and the scooter will start to unfold.
3. Continue to unfold the scooter until it is completely unfolded. You can do this by pulling up on the back of the seat or pushing down the deck.

Manually Folding the Transformer...Cont.

To Close Manually -

1. Pull up on the manual release bar.
2. The front and rear frame will draw closer together.
3. Push the front and rear of the scooter together until they are locked in place.

NOTE – The scooter can be opened with the manual release bar at any time. If the scooter was last closed with the remote control, you will need to then "open" the scooter with the remote control for the scooter to then close with the remote control. If scooter does not lock closed when folding manually, the folding motor is not engaged in the folding mechanism. Press the close button to get the folding motor engaged into the folding mechanism.

Syncing The Remote Control

1. Use your key to turn on the Transformer Scooter.
2. With the Transformer powered ON, press and hold the (A)"Open", button on the Remote Bi-Pass Switch for 5-7 seconds. Release the "A" button and you will hear a long beep from the Transformer.
3. Press, and release the "OPEN" button on the remote control. You should hear five beeps from the scooter if done correctly.
4. Once the five beeps have concluded, press and let go of the (B)"Close" button on the Remote Bi-Pass Switch.
5. Turn scooter off and then back on using the key. Your remote should now be synced.

Remote Bi-Pass Switch

The Remote Bi-Pass Switch is located on the main control pod of the Transformer Scooter.

The Remote Bi-Pass Switch can be used instead of the remote control. To close the scooter, press the (B) "Close" button once, and let go. The scooter will close/fold halfway. Repeat to fully close. To open the scooter press (A) "Open" on the Remote Bi-Pass Switch once, then let go. Repeat to open fully.

6. Safety Requirements

Driving Surface

The TRANSFORMER has the best stability under normal driving conditions (dry, level ground with concrete or asphalt). Extra care must be taken when riding on other surfaces (grass, gravel, etc.)

- Check the physical conditions (tires, battery, bolts) before driving the scooter.
- ***ALWAYS SLOW DOWN BEFORE TURNING.***
- ***ALWAYS TURN THE KEY OFF BEFORE GETTING ON OR OFF THE SCOOTER.***
- The TRANSFORMER can be used safely in short grass and hard gravel.
- Avoid driving in loose gravel, soft soil and sandstone.
- Do not drive the scooter in unknown road conditions.
- The TRANSFORMER can ride over small obstacles within a certain height, but you minimize the speed and slowly drive over the obstacle.
- Do not operate the scooter before you have fully read and understand this manual.
- Do not carry additional riders on the scooter, chassis or lap.
- Do not operate while under the influence of alcohol or drugs.
- Ensure the seat is fixed and fastened.
- Slow down when operating on uneven or soft ground.
- Do not park on slopes.
- Changing the initial setting or refitting your scooter is forbidden and will void the warranty.
- Use caution when operating near busy streets, markets or shopping centers. Do not operate in unsafe areas. Please consult local authorities about the traffic rules for scooters.
- Hold the handlebar with both hands and put both feet on the footboard when operating.
- Never sit on the TRANSFORMER in a moving vehicle.
- Do not exceed the maximum gradient when driving
- Do not exceed the TRANSFORMER maximum weight capacity of 300lbs. This weight includes rider, accessories and baggage.
- Do not reverse on uneven slopes or uneven ground; be careful when passing over slopes.
- Never use the TRANSFORMER to go up and down stairs.
- Never take your TRANSFORMER on an escalator.
- Do not operate on frozen, slippery or salty ground.
- Never charge a frozen battery.

It is unsafe to drive the TRANSFORMER up steep inclines.
Please read the manual instruction completely before operation.

7. Battery Maintenance & Charging

The TRANSFORMER Scooter is designed to use one maintenance free 24.9v/10AH lithium Ion Battery. It comes with an easy to use DC24V-2AH charger.

- Charge the battery completely before the first operation. Not charging the battery completely prior to operating your TRANSFORMER for the first time can cause damage to the battery.
- Make sure key is in the off position before charging the battery.
- The battery MUST be charged monthly.

Charging your TRANSFORMER

1. Turn off the TRANSFORMER and remove the key.
2. Open the charger cap in rear of scooter and insert the charger into the charging port.
3. Plug AC power outlet into household power outlet. Red light (some models may be orange) on the charger indicates power is on and the unit is charging. The green light on the charger means the battery is fully charged.
4. Unplug the charger when charging is complete.

The battery can be charged outside of the scooter using the optional docking station accessory

Match the charger port and charger plug properly. Do not force.

Guide to a Safe & Long Lasting Battery

How does the charger work?

When the battery voltage is low, the battery charger outputs a large current to charge the battery. When the battery voltage is near full, the battery charger outputs a small current. When the battery is full, the battery charger will output very little current. Therefore, the battery will continually charge after connecting the charger, but will not overcharge. It is better to charge the battery for less than 24 hours

What does the light on the charger mean?

The red light (some models may have an orange light) indicates that the scooter is charging. The green light indicates the battery is fully charged.

Can other chargers be used?

To charge safely and efficiently, use the charger supplied by the original manufacturer only. Using any other charger will void warranty.

How often should you charge the battery?

The charge time depends on the use.

- If you're operating the scooter every day, charge after each use so it will have a full charge the next day.
- If you're operating the scooter once a week, then the battery should be charged once a week. If at any time the battery indicator has only red lights lit, charge the battery.
- If you are not using the scooter for more than 3 weeks, remove battery from scooter, store in a warm, dry location and charge every month. The time to charge the battery fully can vary from 12 to 14 hours.

Do not let the battery fully discharge before charging.

How can you get the maximum operating distance?

Driving conditions such as hills, uneven and soft surface, temperature and user weight will affect the distance or running time for battery life.

Methods of obtaining the maximum driving distance

- Fully charge your battery before operating the TRANSFORMER.
- Maintain a constant speed when possible.
- Only carry the necessities to reduce weight.
- Avoid intermittent driving.

Guide to a Safe & Long Lasting Battery...Cont.

Why is the power of my new battery weak?

Deep-cycle batteries use unique chemical technology and design. It can be charged quickly and be used for a long time after full-charge. The battery is fully charged before leaving the factory but may change its initial performance during the transportation due to the temperature. The power of the battery will lessen in higher temperatures and it will extend the charging time in low temperatures. The battery requires a few days to adapt to the surrounding environment before it gets stable performance.
More importantly, a deep cycle battery will get higher performance after several charging – discharging cycles.

Please follow the steps below to improve the battery performance:

- A new battery must be fully charged before using.
- Low speeds are recommended for the first time. Do not travel too far until you are familiar with the operation of the scooter and the battery.
- Fully charge the battery after operating the TRANSFORMER the second time.
- The battery capacity will reach 100% and extend the driving time after four to five charging and discharging cycles.

How to ensure the battery life

A fully charged battery will provide better performance and extend battery life. Do not fully discharge the battery.

How to store scooter and battery

- Charge your battery fully before you store it.
- Remove battery from the TRANSFORMER.
- Store your scooter and battery in warm, dry place. Not hot.
- Avoid storing the scooter in area with temperature variations.
- If storing the scooter, charge battery at least once per month.
- For optimal battery life, be sure to use your scooter monthly.

Do not dismantle the battery, and do not add water. Failure to observe this warning will void the warranty and may damage the battery and scooter.

If battery is frozen, warm for several days before charging.

8. Maintenance

With care and regular maintenance, the TRANSFORMER is designed to provide years of enjoyment. The following will keep your TRANSFORMER running at optimum levels.

Battery

- Make sure battery is fully charged.
- Store the battery in a dry environment.
- Check electrode connections for corrosion.
- Never charge a frozen battery (warm for a couple days before charging).
- Never fully discharge the battery. Charge once a month when storing the scooter.

Seat

- Clean seat cover with clean, damp cloth.

Cleaning

- A clean, damp, non-abrasive cloth works best to wash and clean the TRANSFORMER.
- Do not wash your TRANSFORMER with a water hose as this may create an electrical short and damage the electrical system.

Wiring

- Check all wire connections and wiring insulation for wear and damage regularly. This includes the charger power cord.

Motor, Bearings and Transmission parts

- These components have been lubricated and sealed by the factory, there is no need to lubricate these parts.
- Store in dry environment. Electric components should avoid moisture. If they come into contact with moisture, dry before use.
- Check and tighten bolts regularly.

9. Basic Troubleshooting

Power stops while operating

- Make sure key is in the ON position.
- Make sure battery is properly inserted.
- Make sure battery is properly charged.
- Listen for, and count any beeps coming from the scooter.

Scooter not opening with the Remote Control

- Is the scooter turned on? If no, turn on scooter and try again.
- Is there a light that comes on when you press a button on the remote control? If yes, go to next step. If no, change the battery of the remote control.
- Can you hear beeping from the scooter? If no, check to see if scooter is turned on, then check the connections on the Remote Relay Box next to the folding motor.
  If all connections are good, sync remote control.
- If none work, call for service.

The Transformer Scooter has an opening and closing process that begins when the scooter is open. When the scooter is open, the user has a choice to close it manually or with the remote control. When the scooter is closed manually, the folding mechanism is disengaged. When the folding mechanism is disengaged, the remote control won't close or open the scooter. However, the folding motor will still work. Once the scooter is closed manually, the scooter expects to be opened manually. If you wanted to open the scooter with the remote control, the user must first press the close button on the remote control to have the folding motor catch up to the folding mechanism and become engaged. Once engaged, you will hear a pop. Then you are able to open the scooter with the remote control.

Slow speeds while driving

- Adjust speed control knob.
- Make sure battery is properly charged.

Battery is not charging

- Check that the cord is plugged into the wall and scooter completely.
- If there is no light lit on the charger box when plugged into the wall, the charger may be broken. Call for service.

Lost keys or remote control

- Call your local TRANSFORMER dealer to order replacements

Seat back is loose

- Use 5mm allen wrench to tighten bolts

Armrests not staying up

- Use 4mm allen wrench to adjust bolt on armrest and a 10mm nut is used to hold the bolt in place. First loosen the nut. If you tighten the bolt, the pitch of the arm rest will go down. If you loosen the bolt, the pitch of the armrest will go up. Tighten the nut to lock the pitch into place.

If you continue to have trouble with your TRANSFORMER, contact Enhance Mobility at 800-296-4151 – Option 2 or your authorized TRANSFORMER dealer.

9. Basic Troubleshooting...Cont

Beep Error Codes

1 BEEP	The battery requires charging or there is a bad connection to the battery. Tip: Remove and charge battery
2 BEEPS	There is a bad connection to the motor. Check all connections between the motor and controller.
3 BEEPS	The motor has experienced a short circuit to a battery connection. Tip: Check connections between the motor and batteries.
4 BEEPS	Controller Timeout/Overheating.
5 BEEPS	Not Used
6 BEEPS	Drive Inhibited. Double check to ensure the charger is not plugged into the scooter.
7 BEEPS	Throttle Fault indicated. Move Directional Control Lever left and right. Restart the scooter.
8 BEEPS	A controller fault has been indicated. Make sure all connections are secure.
9 BEEPS	Electromagnetic Braking Fault Indicated. Double check all wires and connections to motor.
10 BEEPS	High Battery voltage. Unplug scooter, and double check all battery connections.

This list of beep codes can help to identify a specific problem within the Transformer Scooter. If your scooter is beeping, it may be indicating a fault within the scooter. Use the corresponding beep codes to narrow down any issues.

10. Warranty Information

Standard Warranty

For the Period Listed below at time of purchase, in the event of defective materials or workmanship, Enhance Mobility will repair or replace at our option the parts that are defective.

TRANSFORMER Scooter
2-year parts for all electrical and mechanical components
1 year warranty for battery
3-year warranty on frame

Warranty Exclusions
Tires
Tubes
Trim Pieces and Plastic Shrouds
Upholstery (Seat Back and Seat Cushions)

This warranty also excludes the following:
Loss or theft of any and all accessories (such as keys, remote controls etc.)
Damage caused by:

Abuse, Misuse or negligence
Improper Storage, Operation or Maintenance
Exceeding the specified weight capacity of the unit
Accessories
Acts of Nature

*Enhance Mobility is not liable for damages caused by shipping.

Enhance Mobility will ship the parts directly to the customer or to the service center of their choice. Enhance Mobility will provide technical assistance and documentation to ensure the scooter is repaired properly.

If after calling in to the Enhance Mobility Service line 800-296-4151- Option 2 and speaking to a service representative, it may be determined that the repair is covered under the warranty and requires return to the factory. In this case the customer will prepay for shipping to and from Enhance Mobility. Shipping Labels will be provided. Labels and return authorizations must be requested and approved by place of Purchase and Enhance Mobility.

Return shipping must be in Original Packing to protect against damage. Enhance Mobility is not responsible for damage caused by shipping. Enhance Mobility will perform the necessary labor and replace covered parts at its expense and ship back to the customer.